As previously discussed, the Office has failed to establish a *prima facie* case of obviousness. To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art as indicated by MPEP § 2143.03. The cited and applied references do not teach, on the one hand, the concept of using a variable of an object as a pointer to a lock, or, on the other hand, the concept of returning an unused lock to the pool of locks without having to destroy an object previously associated with a lock as recited in Claims 1, 11, and 17. Moreover, a number of cited and applied references cannot be combined, such as Brown et al. and Lindholm et al., without destroying the operation of either reference.

On Thursday, January 9, 2003, applicant's attorney held telephone interviews with Examiner Zhen to clarify the position of the Office and the claimed invention. During these interviews, the candid remarks of Examiner Zhen were noted with appreciation although no agreement was reached. More particularly, the questionable combination of Brown et al. and Lindholm et al. was discussed. In response to the Examiner's remarks and requests, applicant has provided below further clarifying discussions of the teachings of Brown et al. and Lindholm et al. These discussions are not provided to define the scope or interpretation of any of the claims of this application. Instead, such discussions are provided to help the Office better appreciate important claim distinctions.

The system of Brown et al. is directed to adding synchronization capability to an object at run time via a locking mechanism. Brown et al. decries that, in the prior art, a monitor is not bound to the object even though a monitor is logically associated with an object. *See* Brown et al. at col. 2, lines 47-48. Brown et al. provides a locking mechanism that is bound to an object for the life of the object. *See* Brown et al. at col. 3, lines 61-63.

Not so with Lindholm et al. Lindholm et al. uses a cache of monitors for synchronizing objects without binding a monitor for the life of an object. In the Summary of the Invention,

LAW OFFICES OF CHRISTENSEN O'CONNOR JOHNSON KINDNESSPLLC 1420 Fifth Avenue, Suite 2800 Seattle, Washington 98101 206.682.8100 Lindholm et al., unlike Brown et al., explains that a synchronization construct need not be assigned to an object for the life of the object: "[W]hen a specific thread seeks desynchronization with a specific object to which is allocated a specific synchronization construct that has been assigned to synchronize the specific thread with the specific object, there are no other threads synchronized by the specific synchronization construct, and no other threads are waiting to synchronize the specific object, the cache manager de-allocates the specific synchronization construct and returns the specific synchronization construct to the free list." See Lindholm et al. at col. 2, lines 57-65. Unlike Brown et al., a monitor assigned to an object is not bound to the life of the object in the system of Lindholm et al. Otherwise, the cache manager of the system of Lindholm et al. cannot "[de-allocate] the specific synchronization construct and returns the specific synchronization construct to the free list."

An object is not destroyed in the system of Lindholm et al. in order to free a locking mechanism. But not so in the system of Brown et al. Because the system of Brown et al. binds a locking mechanism to an object for the life of the object, the locking mechanism cannot be available for use until the corresponding object is destroyed. To combine, either the approach of Brown et al., which binds a locking mechanism to the object for the life of the object, must be abandoned, or the approach of Lindholm et al., which does not bind the synchronizing construct to the object for the life of the object, must be jettisoned, and the combination would destroy the operation of either reference. See MPEP § 2143.01 (the proposed modification cannot change the principle of operation of a reference); *see also, In re Grasselli*, 713 F.2d 731, 743, 218 U.S.P.Q. 769, 779 (Fed. Cir. 1983) (references cannot be combined where reference teaches away from their combination).

In view of the foregoing remarks, applicant submits that all of the claims in the present application are clearly patentably distinguishable over the teachings of the cited and applied

LAW OFFICES OF CHRISTENSEN O'CONNOR JOHNSON KINDNESS\*\*LCC 1420 Fifth Avenue, Suite 2800 Seattle, Washington 98101 206.682.8100 references. Applicant submits that this application is in condition for allowance. Reconsideration and reexamination of the application and allowance of the claims and passing of the application to issue are solicited.

Respectfully submitted,

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## **CERTIFICATE OF MAILING**

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